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STEREOTYPE THREAT AND ITS EFFECT ON MINORITY STUDENT ACHIEVEMENT

At A Glance

Stereotype threat occurs when students are placed in situations where their performance can confirm a negative stereotype about their group's intellectual ability. Stereotype threat can affect the performance of African American students as well as any student whose group is the subject of a negative stereotype regarding their intellectual ability. The research on stereotype threat, how stereotype threat impairs performance, and techniques educators can use to reduce its negative effects are discussed.

Stereotypes produce expectations about what people are like and how they will behave. They bias people's perceptions and treatment of others. By age 6, virtually everyone is aware of cultural stereotypes. As early as age 11, children become concerned with others' evaluations of them, understand that the world has negative expectations for certain groups, and develop their own ideas about intellectual ability (Aronson, 2004).

The basic idea behind stereotype threat is that Black students bear an extra cognitive and emotional burden when they are placed in situations where their intellectual ability is the subject of a negative stereotype (such as taking an intellectually challenging test). The student becomes concerned that he or she will do poorly on the test and be judged according to the negative stereotype, thereby confirming their inferiority in the eyes of others, in their own eyes, or both. This concern detracts from students' ability to focus all of their attention on the test and results in poorer test performance (O'Brien and Crandall, 2003; Steele and Aronson, 1995). It is not necessary for students to believe the stereotype to feel this burden. They need only be aware of it and care enough about performing well to want to disprove the stereotype (Aronson et al., 2002).

Research on Stereotype Threat

Steele and Aronson (1995) compared African American students' performance in testing situations when stereotype threat was introduced versus when it was eliminated. They found that students scored significantly higher in the non-threat condition than they did in the threat condition and concluded that the introduction of stereotype threat led to decreases in students' levels of performance. This finding has been replicated with other groups of students, including Hispanics, women, and those of low socioeconomic status (O'Brien and Crandall, 2003; Aronson et al., 1999; Aronson and Salinas, 1997), leading researchers to conclude that stereotype threat can undermine the performance of virtually anyone whose group is targeted by a stereotype that predicts a lack of intellectual ability (Aronson et al., 1999).

In most studies, stereotype threat is introduced through the testing instructions. In the threat condition, students are told they will be taking a test of intelligence; in the non-threat condition, students are told they will be completing a problem-solving task that the researchers have developed. Both groups of students actually take the same test (Aronson, 2004). Other researchers have been able to induce stereotype threat simply by asking African American students to indicate their ethnicity on their test's answer sheet (Shih et al., 1999; Croizet and Claire, 1998; Steele and Aronson, 1995).

While studies have found that the elimination of stereotype threat increases Black students' test scores, the research, however, has not found that its elimination reduces the achievement gap between Black and White students. The findings actually show that when stereotype threat is eliminated, Black and White students' scores differ to the extent that is traditionally observed. When stereotype threat is introduced, however, the difference between Black and White students' scores is even larger (Sackett, 2004).

The phenomenon of stereotype threat illustrates that performance levels are situational and can be influenced by factors other than students' levels of skill and achievement, including the circumstances surrounding the testing situation and students'

perceptions about their own abilities. The demonstration of the existence of stereotype threat shows, for the first time, that the same testing experience can have a different effect on one group of students than it has on another (Aronson, 2004; Aronson et al., 1999).

How Stereotype Threat Impairs Performance

Researchers have found that stereotype threat leads students to try harder on tests, but with less efficiency. The increased effort is aimed at invalidating the negative stereotype. Stereotype threat may cause a deficiency in cognitive processing, similar to that caused by other evaluative pressures (such as the presence of an audience, test anxiety, or competition). Performance becomes impaired by higher levels of anxiety, distraction, narrowed attention, and self-consciousness. As stereotype threat persists over time, students feel pressured to alter their concept of academic achievement so that success in school is not the basis of their personal identity. Students' interest, motivation, and achievement all eventually diminish (Aronson, 2004; Steele and Aronson, 1995).

Lower expectations may further undermine students' performance. As performance decreases under stereotype threat, and as that decrease is interpreted as a sign of group-based intellectual inferiority, students' expectations about their ability begin to drop. The drop occurs at a faster rate than if the stereotype did not exist to credit the decrease in performance (Steele and Aronson, 1995).

O'Brien and Crandall (2003) found that heightened levels of arousal may also contribute to stereotype threat's effects on performance. Performing under the anxiety of trying to disprove a negative stereotype is enough to create high levels of arousal, which interfere with performance and the completion of complex tasks.

Students who are most vulnerable to stereotype threat are those who are the most invested in performing well. If students identify with the subject being tested and competence in the subject is important to their self image, they will be more likely to experience stereotype threat (Aronson et al., 1999).

How Educators Can Help

Educators can use the following techniques to reduce the negative effects of stereotype threat:

- When the concept of stereotype threat is explained to students, they interpret their struggles in a less disparaging and anxiety-producing way. Studies have found that students receive higher test scores when they understand that their test anxiety is a common response to stereotyping (Aronson, 2004; Aronson and Williams, 2004).
- Students should be taught that their abilities are expandable. Teachers can explain that intelligence is not a fixed limitation and suggest to students that they think of the mind as a muscle that gets strengthened and expanded with hard work (Aronson, 2004). Studies have found that students who were told their ability was fixed reported more anxiety and solved fewer test problems, while those who were told their ability was expandable solved more items and reported less anxiety (Aronson, 2004; Aronson et al., 2002).
- School staff should make every effort to minimize stereotype threat. Cooperative classroom assignments, where students work interdependently, have been shown to produce increases in minority students' test scores, grades, and levels of engagement because this type of environment reduces competition, distrust, and stereotyping among students (Aronson and Patnoe, 1997).
- Teaching students skills to cope with heightened levels of arousal in test-taking situations (such as relaxation techniques, deep breathing, and positive thinking) may reduce some of the detrimental effects of stereotype threat (O'Brien and Crandall, 2003).
- Exposing minority students to role models who have triumphed over similar academic struggles with hard work and perseverance has been shown to improve students' study habits, grades, and test scores (Aronson, 2004).

Summary

Students bear an extra cognitive and emotional burden when they are placed in situations where their performance can confirm a negative stereotype about their group's intellectual ability. This burden is called stereotype threat and it can undermine the performance of anyone whose group is labeled with a stereotype that alleges a lack of intellectual ability. Researchers have found that African American students score significantly lower in test-taking situations where stereotype threat is introduced than in situations where it is eliminated. This finding has been replicated with other groups of students, including Hispanics, women, and those of low socioeconomic status, leading researchers to conclude that stereotype threat can affect the performance of any student whose group is the subject of a negative stereotype regarding their intellectual ability. Educators can reduce the negative effects of stereotype threat by making students aware of its existence and the role it plays in their performance, explaining to students that their abilities are expandable, and teaching skills to cope with heightened levels of arousal.

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